

In Situ Generation of Antimicrobial Compounds via Biological Processes

A global FSTE top 20 FMCG company with business in Hygiene is seeking research focused on ***in situ* generation of biologically (microbe or enzyme) generated antimicrobials**. Our client wishes to identify **antimicrobial molecule generation, as well as biological molecule to antimicrobial molecule generation**.



Approaches of Interest

Microbe to antimicrobial agent generation. Examples of this could include, but are not limited to:

- *Probiotic generation of post-biotics*: post- biotics could include antimicrobial peptides (AMPs), antimicrobial lipids (AMLs), organic acid species (e.g lactic acid and citric acid...), and endospores
- *Fungi to molecule generation*: such as mycotoxins, enzymes, quorum-sensing molecules

Biologic to antimicrobial agent generation. For example:

- Enzymes such as glucose oxidase (H₂O₂ production *in situ*)
- Isolated enzymes that are produced by microbes but in their own right produce antimicrobial agents (such as AMPs and AMLs)
- Ideally, the agents may be associated with a positive impact/change to the environment on the skin and/or hard surface

Opportunities with the following are of highest interest:

- Where the agent produced is already registered as a biocidal active agent
- Safety testing has been conducted on biocatalysts and the agents generated
- Robust efficacy testing has conducted to show the antimicrobial properties of the opportunity
- There is a clear strategy or road map to understand registration of the technology with regulatory bodies
- Residue testing of technology to show long-lasting effect/colonisation effect of technology

Key Information

Example Applications: Hard surface cleaners, personal care rinse off and leave on skin products, wipes or other surface sanitisation formats, laundry formats.





Out of Scope: Non-biological catalysts and photocatalytic *in situ* generators.

Stage of Development: Our client is interested in basic research through to clinical phase 1 (TRL3+). Applications with validations e.g. *in vitro*, *ex vivo* and/or *in vivo* data is of the highest interest.

Submission Information: Submission of one-page, 200-300 word briefs are encouraged. In submitting to this campaign, you confirm that your submission contains only non-confidential information.

Potential Collaborations for Academics: Our client is open to a range of collaboration opportunities, with the most appropriate outcome being decided on a case-by-case basis. Example outcomes include licencing, consulting, project funding and research collaborations.

Opportunities sought

-  Spinout companies
-  Research projects
-  Centres of excellence
-  Academics and expertise
-  Technologies

Submissions

Please submit relevant, non-confidential opportunities online via: discover.in-part.com

Deadline: **6th December 2021 - 11:59 pm GMT**

Have any questions?

Contact our team at discover@in-part.co.uk

